

**PATENT**  
Attorney Docket No. CASE-02138

**Appendix 2 - Pending Claims**

1. A method of monitoring immunization, comprising:
  - a) providing: i) a human, and ii) an immunizing preparation comprising myelin basic protein and Incomplete Freund's Adjuvant;
  - b) immunizing said human with said immunizing preparation;
  - c) obtaining a primary cell population from said human comprising T cells capable of secreting cytokines; and
  - d) determining if said T cells are primarily Th2 cells secreting an anti-inflammatory cytokine or primarily Th1 cells secreting an inflammatory cytokine, wherein said Th2 cells secreting an anti-inflammatory cytokine indicates that said immunizing is protective against multiple sclerosis.
  
25. A method of monitoring immunization, comprising:
  - a) providing: i) a human with symptoms of multiple sclerosis, and ii) an immunizing preparation comprising myelin basic protein and Incomplete Freund's Adjuvant;
  - b) immunizing said human with said immunizing preparation;
  - c) obtaining a primary cell population from said human comprising T cells capable of secreting cytokines; and
  - d) determining if said T cells are primarily Th2 cells secreting an anti-inflammatory cytokine or primarily Th1 cells secreting an inflammatory cytokine, wherein said Th2 cells secreting an anti-inflammatory cytokine indicates that said immunizing is effective for treating symptoms of multiple sclerosis.
  
26. A method of monitoring immunization, comprising:
  - a) providing: i) a human, and ii) an immunizing preparation comprising myelin basic protein and Incomplete Freund's Adjuvant;
  - b) immunizing said human with said immunizing preparation;
  - c) obtaining a primary cell population from said human comprising T cells capable of secreting cytokines;

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- d) adding said primary cell population to a microwell comprising a hydrophobic membrane having a first cytokine binding ligand, under conditions such that said T cell secretes a cytokine that binds to said first cytokine binding ligand;
- e) adding a second cytokine binding ligand to said microwell under conditions such that said cytokine binding ligand binds to said cytokine; and
- f) detecting said secreted cytokine, thereby monitoring said immunizing.

- 27. The method of Claim 26, wherein said detected cytokine is IL-5.
- 28. The method of Claim 26, wherein said detected cytokine is IL-4.
- 29. The method of Claim 26, wherein said detected cytokine is IL-10.
- 30. The method of Claim 26, wherein said detected cytokine is IFN $\gamma$ .
- 31. The method of Claim 26, wherein said detected cytokine is IL-2.
- 32. The method of Claim 26, wherein said hydrophobic membrane comprises polyvinylidene difluoride.
- 33. The method of Claim 26, wherein said microwell comprises an enclosed bottom.
- 34. The method of Claim 1, wherein said determining comprises detecting said secreted cytokine.
- 35. The method of Claim 1, wherein said secreted cytokine is IL-5.
- 36. The method of Claim 1, wherein said secreted cytokine is IL-4.
- 37. The method of Claim 1, wherein said secreted cytokine is IL-10.

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38. The method of Claim 1, wherein said secreted cytokine is IFN $\gamma$ .
39. The method of Claim 1, wherein said secreted cytokine is IL-2.
40. The method of Claim 25, wherein said determining comprises detecting said secreted cytokine.
41. The method of Claim 25, wherein said secreted cytokine is IL-5.
42. The method of Claim 25, wherein said secreted cytokine is IL-4.
43. The method of Claim 25, wherein said secreted cytokine is IL-10.
44. The method of Claim 25, wherein said secreted cytokine is IFN $\gamma$ .
45. The method of Claim 25, wherein said secreted cytokine is IL-2.